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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/482,888	01/14/2000	Peter Joseph Hollands	0142-0309P	7631	
2292	7590 06/28/2002				
BIRCH STEWART KOLASCH & BIRCH			EXAMINER		
PO BOX 74		HUFFMAN, JULIAN D			
FALLS CHO	JRCH, VA 22040-0747				
			ART UNIT	PAPER NUMBER	
			2853		
			DATE MAILED: 06/28/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application	No.	Applicant(s)				
	09/482,888		HOLLANDS ET AL.	110			
Offic Action Summary	Examiner		Art Unit	_ jre			
omo nodon cummu,							
The MAILING DATE of this communication app	Julian D. Hu		2853 orrespondence addre	ess			
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no even y within the statute will apply and will cause the applic	t, however, may a reply be tim ony minimum of thirty (30) days expire SIX (6) MONTHS from ation to become ABANDONE	nely filed s will be considered timely. the mailing date of this comm D (35 U.S.C. § 133).	nunication.			
1)⊠ Responsive to communication(s) filed on <u>22 A</u>	April 2002 .						
, —	is action is n	on-final.					
3) Since this application is in condition for allowa closed in accordance with the practice under	ance except Ex parte Qu	for formal matters, pr a <i>yle</i> , 1935 C.D. 11, 4	rosecution as to the r 53 O.G. 213.	nerits is			
Disposition of Claims							
4) Claim(s) 1-7 is/are pending in the application.							
4a) Of the above claim(s) <u>7</u> is/are withdrawn from	om considera	ation.					
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1,3,5 and 6</u> is/are rejected.							
•	7) Claim(s) <u>2 and 4</u> is/are objected to.						
8) Claim(s) are subject to restriction and/o Application Papers	or election red	quirement.					
9) The specification is objected to by the Examine	ar.						
10) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 14 January 2000 is/are:		ed or b)□ objected to l	by the Examiner.				
Applicant may not request that any objection to the							
11) The proposed drawing correction filed on							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13)⊠ Acknowledgment is made of a claim for foreign	n priority und	ler 35 U.S.C. § 119(a	ı)-(d) or (f).				
a)⊠ All b)□ Some * c)□ None of:				•			
1. Certified copies of the priority document	ts have been	received.					
2. Certified copies of the priority document	2. Certified copies of the priority documents have been received in Application No						
 3. Copies of the certified copies of the prio application from the International Bu * See the attached detailed Office action for a list 	ıreau (PCT F	Rule 17.2(a)).		age			
14) Acknowledgment is made of a claim for domest	ic priority un	der 35 U.S.C. § 119(e) (to a provisional a	pplication).			
 a) The translation of the foreign language pro 15) Acknowledgment is made of a claim for domest 	ovisional app	olication has been rec	ceived.				
Attachment(s)							
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 	·		y (PTO-413) Paper No(s). Patent Application (PTO-				

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DETAILED ACTION

Election/Restrictions

- 1. Claim 7 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Group, there being no allowable generic or linking claim.

 Applicant timely traversed the restriction (election) requirement in Paper No. 7.
- Applicant's election with traverse of the election requirement in Paper No. 7 is 2. acknowledged. The traversal is on the ground(s) that claim 7 comprises all of the limitations of claim 1 and that the invention of claim 1 cannot be made by another and materially different process, such as laser ablation. Applicant further asserts that the examiner would be required to search class 346 and 216. This is not found persuasive. Claim 1 contains a limitation directed towards the means for manufacturing the apparatus, which is not given patentable weight. This limitation is also present in method claim 7, where such a limitation is given patentable weight. Further claim 7 recites a flexible sheet using the language "covering the open sides of the ink channels with flexible sheet", and also recites the order in which the structure is bonded, using the language "where in the channel plate, the flexible sheet and the actuator block together form a unit which is then fitted to the base member" Thus claim 7 comprises additional limitations. Further, applicant's broad statement that the invention could not be made by laser ablation is not deemed persuasive as no specific arguments or evidence have been provided to support this statement. The definition for 216/27 is as follows: Process wherein etching is used in the forming or treating of an article whose ultimate use is to expel an ink droplet, and in which the ink droplet is produced by the

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action of thermal energy to form a propelling vapor. Class 216/27 is concerned with methods for manufacturing ink jet printheads using etching. In this case, this area was not searched by the examiner as it was not deemed pertinent to the invention as originally claimed.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 6, there is insufficient antecedent basis for the phrase "two separate channel plates".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 6. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application

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being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 3 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Akahane (U.S. 6,142,616).

Akahane discloses an ink jet printhead comprising:

a channel plate (fig. 1, element 10) made of silicon (column 6, lines 27-33) having a plurality of ink channels (12),

actuators respectively associated with each of the ink channels for pressurizing ink contained in the ink channels (70),

means defining an ink reservoir communicating with the ink channels (41), wherein said ink reservoir is defined by a base member (40) made of a material (stainless steel, column 5, lines 17-19) different from that of the channel plate (silicon), and

wherein the channel plate is fixed to the base member by means of an adhesive (column 6, lines 27-33, column 7, lines 12-16).

Response to Arguments

7. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

8. Claim 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The prior art of record does not disclose a base member sandwiched between two separate channel plates.

Claims 2 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With regards to claim 2, the prior art of record does not disclose the channel plate held in butting engagement (in contact with) a surface of the base member.

With regards to claim 4, the prior art of record does not disclose a base member made of graphite.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian D. Huffman whose telephone number is (703) 308-6556. The examiner can normally be reached on Monday through Friday from 9:30 a.m. to 6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow, can be reached at (703) 308-3126. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722. Faxes requiring the immediate attention of the examiner may be sent directly to the

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examiner at (703) 746-4386. Note that this number will not automatically send a confirmation that the fax was received.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JH

June 25, 2002

/ John Barlow

Supervisory Patent Examiner Technology Center 2800